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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/941,085	08/28/2001	Erik C. Houge	BINDELL 23-24-1-23-18	5839

27964 7590 07/10/2003

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EXAMINER

PATEL, PARESH H

ART UNIT	PAPER NUMBER
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2829

DATE MAILED: 07/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Applicati n No.

09/941,085

Applicant(s)

HOUGE ET AL.

Examiner

Paresh Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8, 21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 21 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election without traverse of invention (Group I, claims 1-8 and 21-22) in Paper No. 3 is acknowledged.

### ***Specification***

The disclosure is objected to because of the following informalities: in the abstract replace "The present invention provides a" with --A--. Also in the title delete "and method of manufacturing the same".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 and 21-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Bahns et al. (US 6020747).

Regarding claim 1, Bahns et al. (hereinafter Bahns) discloses: A probe [11, 14, 54], comprising: a probe body [body of probe 11 except fiber 13] having a body longitudinal axis [axis is imaginary here, i.e. vertical axis of 14, 11 or 54] and a shoulder [end of probe body of 11, end of 14 and end of 58 all towards fiber 13, 10 or 52 respectively]; and a microstylet [carbon nanotube and fiber 10 or 13 or 52 and lines 47-

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49 of column 3 and lines 10-26 of column 4] mechanically coupled to and extending from the shoulder and having a microstylet longitudinal axis [inherent to above elements] coincident the body longitudinal axis, the microstylet having a cross section substantially smaller than a cross section of the probe body [see diameter of fiber 10 or 13 or 52 with diameter of probe body 11 or 14 or 58].

Regarding claim 2, Bahns discloses: The probe as recited in claim 1 wherein the microstylet [carbon nanotube] comprises an acerate microparticle [lines 36-51 of column 3] selected from the group consisting of: a carbon whisker [carbon rod]; a metal needle; and a diamond [lines 36-51 of column 3].

Regarding claim 3, Bahns discloses: The probe as recited in claim 1 wherein the carbon nanotube is a single-walled carbon nanotube or a multi-walled carbon nanotube [lines 52-55 of column 3].

Regarding claim 4, Bahns discloses: The probe as recited in claim 1 wherein the probe body comprises a tube [glass tube, 14 and lines 51-53 of column 5].

Regarding claim 5, Bahns discloses: The probe as recited in claim 1 wherein the probe body comprises a glass tube [glass tube, 14 and lines 51-53 of column 5].

Regarding claim 6, Bahns discloses: 6. The probe as recited in claim 1 wherein a portion of the microstylet resides within the probe body [see 52 in fig. 3].

Regarding claim 7, Bahns discloses: The probe as recited in claim 1 wherein the shoulder includes a fastigate shoulder [conical end of 56].

Regarding claim 8, Bahns discloses: The probe as recited in claim 1 wherein the probe is a field emitter, a micromanipulator or a microinjector [lines 53-65 of column 8].

Regarding claim 21, Bahns discloses: A probe [11 with 14], comprising: a probe body [body of 11 and 14 and 56] having a body longitudinal axis [imaginary vertical axis of 11 with 14 and 56] and a shoulder [end of 11 or 14 or 56]; and a carbon nanotube [52 or 82 or 10, 12, 13] mechanically coupled to and extending from the shoulder and having a carbon nanotube longitudinal axis [imaginary vertical axis of 52, 82, 10, 12, 13] coincident the body longitudinal axis [see fig. With these elements], the carbon nanotube having a cross section substantially smaller than a cross section of the probe body [also see diameter of 14 and 10 and other similar elements of all figures].

Regarding claim 22, Bahns discloses: The probe as recited in claim 21 wherein the carbon nanotube is a single-walled carbon nanotube or a multi-walled carbon nanotube [lines 51-55 of column 3].

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paresh Patel whose telephone number is 703-306-5859. The examiner can normally be reached on M-F (8:30 to 4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kammie Cuneo can be reached on 703-308-1233. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

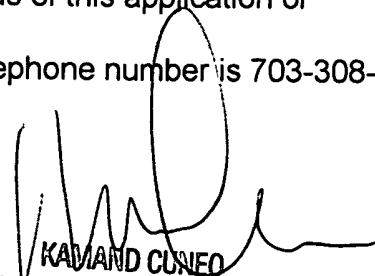
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Paresh Patel  
June 24, 2003



KAVIAR CUNEO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800